Subject:	Space Communications Customer Forum #10 Summary
Date:	December 9, 2004
Location:	Building 3 Goett Auditorium, Goddard Space Flight Center (GSFC)
Convened:	1:00 p.m. **Adjourned:** 3:30 p.m.

I. Welcome and Introductory Comments

Mr. Al Levine/Code 451, Service Planning Manager for Customer Commitment, convened the Space Communications Customer Forum (SCCF), renamed from the Mission Services Customer Forum (MSCF), by welcoming everyone to this, the 10th forum. Mr. Levine noted that the forum is intended to be an interactive session and encouraged attendees to participate. Mr. Levine asked that participants complete the survey form, provided in the package, with their comments, opinions, and suggested topics for future forums. The surveys will serve to assess the effectiveness of the forums, identify areas for improvement, and provide feedback to center management. Mr. Levine noted that it was recently suggested to incorporate splinter group meeting in future forums, and asked for feedback on this item from the audience.

II. Opening Remarks

Mr. Roger Flaherty/Code 450, Deputy Program Manager for Space Communications Program, provided opening remarks. Mr. Flaherty repeated the importance of receiving feedback regarding the forum, and noted that it is used to ensure that the products and services provided are what the customers' needs and wants.

Mr. Flaherty discussed some of the Space Communications Program's highlights from 2004, as well as ongoing initiatives that the SCP is involved in. These included the Swift launch; implementation of the Mar Laser Communications Demonstration, the Space Network Expansion, and the TDRSS Continuation Projects; continuation of preparations for Return-to-Flight, and participation in the Architectural issues at the agency level.

Mr. Flaherty stated that the SCP's customer community continues to grow and that there are good programs in place to expand and enhance the services that are provided today and the services that will be provided in the future. With customer feedback and inputs, the SCP can tailor its future plans around what the customer community sees as essential needs.

Note

Presentations referenced in the following paragraphs are available online at URL http://scp.gsfc.nasa.gov/sccf/.

III. Action Item Review

Mr. Levine reviewed the action item that was assigned to him at the last Customer Forum, which read, "publish the document that contains the procedure for determining critical support." Mr. Levine summarized the response as follows:

Procedures for determining 'critical support' are documented in the priority lists, *451-List-SN/Priority* and *451-List-GN/Priority*, which are posted to the Centralized Configuration Management System (CCMS) at http://gdms.gsfc.nasa.gov/gdms/pls/appmenu.

This action is considered closed.

IV. Mission Operations Mission Services (MOMS)

Ms. Shuby Ambardekar/HTSI, MOMS Deputy Program Director, presented an overview of the MOMS. Ms Ambardekar discussed the MOMS team members, the MOMS organization, the customer interfaces, technical overview, and Program achievements.

The MOMS Program headed by Mr. Mike Blackwell, Program Director, provides Mission Operations and Systems support for Earth Science, Space Science, and the office of Human Spaceflight customers at Goddard Space Flight Center (GSFC). Its scope encompasses all mission phases including formulation, development, and operations during the mission life through decommissioning. Services include Flight Operations, Mission Data Collection and Distribution, Flight Dynamics support, Mission Systems Integration support, and NASA Communications Support. It is a Cost Plus Award Fee (CPAF)/Task Order Based contract with a 5-year base period plus two 1- year options.

Program highlights from the first evaluation period of November 2003 - April 2004 included the successful transition from CSOC while maintaining continuity in Flight Operations and Science data processing, delivery of all FDF products on or ahead of schedule and the successful support of two Expendable Launch Vehicle (ELV) launches, flawless support to the HST Project with no change in staffing, and the seamless transition of the NASA Communications support.

Program highlights from the recently completed evaluation period of April 2004 – October 2004 included the continuation of outstanding technical performance in all operations and engineering areas, the successful support of nine launches, keeping attrition in critical areas below five percent, and implementing opportunities for achieving cost savings and cost avoidance to the Government.

V. Near Earth Network Services (NENS)

Mr. John Grassel/HTSI, NENS Customer Commitment Manager, presented an overview of the NENS Program. Mr. Grassel discussed the NENS customer organization, NENS team members, NENS organization, NENS support services, and Program achievements.

The NENS Program headed by Mr. Todd Probert, Program Director, provides tracking and data acquisition for near-earth customer missions, including operations, maintenance, and sustaining engineering for Near Earth Networks Services which includes the Space Network comprised of a fleet of on-orbit Tracking and Data Relay Satellites (TDRS) and the Ground Network consisting of an Orbital Network and Sub-orbital Network Range. It is a CPAF contract with a 5-year performance period.

Program highlights from the first performance period included the successful transition from CSOC with no impact to ongoing operations, exceeded the Standard of Excellence (SOE) for all operations metrics, supported five scheduled launches and established fourteen new customers, and negotiated commercial-provided contracts to save the Government approximately three million dollars.

VII. Human Space Flight (HSF)

Mr. Melvin Calhoun/HTSI NENS, presented the HSF status. Mr. Calhoun discussed the HSF Integrated Network Return-to-Flight (RTF) and International Space Station (ISS) statuses.

The RTF launch window is currently May 12 through June 3, 2005 with a RTF Mid-point review scheduled for January 11, 2005 at GSFC. Several tests have been completed with additional tests scheduled including the 7-day JSC Long Duration Simulation planned for February 28, 2005. There are several network upgrades in progress including the External Tank Television (ET TV) support, the WSSH UHF A/G support, the GUAM TV support, and the Remote Tracking Stations (RTS) support.

Ongoing activities in support of the ISS include VHF support upgrades, testing with the Automated Transfer Vehicle (ATV) and H-II Transfer Vehicle (HTV), and the ISS Downlink Enhancement Architecture (IDEA) Phase II effort.

VIII. Space Science Mission Operations (SSMO)

Ms. Leslie Ambrose/Code 451, Mission Commitment Manager, presented a status of the SSMO Project. Ms. Ambrose provided an overview of the SSMO organization and Mission Set, and discussed updates to the Mission Set per the Office of Space Science guidance as well as highlights from the SSMO.

The SOHO and TRACE missions were featured in the July 2004 edition of National Geographic.

The Long Duration Balloon Project (LDBP) and Ultra Long Duration Balloon Project (ULDBP) missions, BESS and CREAM have completed testing and are ready for launch. BESS is scheduled to launch tonight. The CREAM launch may be delayed a few days to avoid any interference with BESS.

The current launch date for C/NOFS is May 2005. It is scheduled for 24/7 DAS support.

Swift, the first operational customer on DAS, launched on November 28, 2004 and has been receiving DAS and MA support. DAS has provided very good engineering data, but has experienced several anomalies that impact science operations. Contingency measures have been implemented and the supporting elements continue to work to resolve the problems.

IX. NASA Integrated Network Services (NISN)

Mr. Jerry Zgonc/ Code 291, NISN Service Manager, presented the NISN status. Mr. Zgonc discussed the NISN Customer Interface Group, NISN Requirements Information and Template, the Norway Fiber Initiative, the Mission Operations Voice Enhancement (MOVE) Project, and the NSAP Technology Refresh (NTR).

Mr. Zgonc identified the GSFC and MSFC civil servant personnel who serve as NISN Service Managers in the Customer Interface Group (CIG). Mr. Zgonc also identified the GSFC and MSFC UNITeS support personnel that are part of the CIG team.

NISN is developing a requirement template for new project communication requirements that will be added to existing Project PSLAs and NRDs with the intent of moving towards an online/electronic submission process.

The Norway Fiber Initiative is a joint effort between NASA, NOAA, and the Air Force to integrate requirements at Norway onto dual OC-3 services. The task is about 2 years old and is expected to be completed by January 31, 2005. The formal transition date is mid-February 2005.

The purpose of the MOVE Project is to replace the existing mission voice systems with Commercial Off-the-Shelf (COTS) products at NASA Centers and locations. For additional information, visit the MOVE website at: http://move.nasa.gov

The NTR task will replace existing AT&T equipment in the Mission Network with higher speed links that will provide increased support capacity and enhanced network management capability. Site surveys are in progress and the tentative completion date for the task is mid-to-late 2006.

Question from the audience: Are there any changes anticipated to the IONET services as a result of the NTR task? Mr. Zgonc responded that all of the IONET services will transition to the new network with no changes to the IONET services.

Question from the audience: Will the IONET firewalls be impacted by the ongoing enterprise architectural work being done by GSFC? Mr. Zgonc responded that the current IT Code 297 requirements will remain in place and not be changed due to this equipment change.

X. Flight Dynamics Facility (FDF)

Ms. Sue Hoge/Code 595, Operations Director for Flight Dynamics, presented the FDF status. Ms Hoge discussed changes from 2004, recent activities, and upcoming activities for FDF.

In January 2004, the Flight Dynamics Analysis Branch assumed technical and programmatic management of FDF under the MOMS work package.

Recent activities included the support of Gravity Probe-B, AURA, Swift, and several commercial launches. Began development of a plan for facility hardware upgrades and developed requirements for FDF backup functions.

Upcoming activities include continuing support of missions including ELV support for DDI, NOAA, and GOES; upgrading hardware systems; developing implementation plan for FDF backup functions; and identifying process improvements and cost savings.

XI. Ground Network (GN)

Ms. Christine Hinkle/Code 453, Ground Network Project Business Manager, presented the GN status. Ms. Hinkle summarized the results of Ground Network Independent Assessment.

On October 2, 2004, the Science Mission Directorate (SMD) chartered an Independent Assessment of the Ground Network to “provide observations and findings to achieve significant and realistic efficiencies to help us guide strategic and management decisions”. An eighteen member Panel was assembled, chaired by Mr. Jim Costrell of the Space Operations Mission Directorate. The GN Project provided a series of briefings and tours to the Panel on November 8, 9, and 10 at Wallops as well as tours of the MILA ground station on November 16 and 30. The Panel’s final report is due to the SMD Program Management Council in early January in time to impact the FY05 budget cycle. The GN Project held a working session on December 2 to kick-off development of an action plan to respond to the Panel’s findings.

XII. Space Network (SN)

Mr. Keiji Tasaki/Code 452, Space Network Project Manager, provided an overview of the SN support status. Mr. Tasaki discussed the TDRS spacecraft statuses, the SN Network status, the SN Error/Anomaly trends, and the on-going SN initiatives.

The F-3 spacecraft is now yellow and there is a concern regarding its age. To mitigate the risk of F-3 failing, the F-7 spacecraft is being repositioned to 275° West. It will take approximately 125 days to reposition F-7 to 275° West. In the interim, the Canberra TDRS Facility Project is being implemented to provide a contingency for F-3 support. The Canberra TDRS Facility Project entails resurrecting the Canberra site by outfitting its existing 10 Meter antenna with TTC equipment and making it operational.

The F-10 spacecraft has been moved to 41°W and F-9 has been moved closer to F-4 at 41°W. The November 2004 proficiency level for normal operations is 99.978 percent and 99.96 for critical supports. The SN provides an average of 10, 000 hours of support per month. The SN Error/Anomaly Trends for operator errors, software errors, and hardware errors were minimal for the month of November 2004.

The TDRS KSAR Upgrade Project (TKUP) has been funded. Work on the Project will accelerate as the new Product Design Lead (PDL), Ms. Caren Gioannini, continues to become familiar with the Project.

Ms. Donna Sadof/Code 452, BRTS Product Design Lead, discussed the Bilateration Ranging Transponder System (BRTS) Augmentation status. The Systems Requirements Review was held on March 3, 2004 and all associated Requests for Actions (RFAs) have been closed. The QSS analysis was expanded to include additional considerations and is scheduled to be presented tomorrow, December 10. The NENS Task is scheduled to start in January 2005. The Operations Readiness Review (ORR) is scheduled for June 2006.

Mr. Tasaki noted that several design changes have occurred on the Second Guam Antenna System (SGAS) task. The changes include incorporating Space Network Enhancement (SNE) requirements for antenna and facilities, and increasing the SGL antenna size from 11 meters to 16.5 meters. Currently, the SGAS ORR is scheduled for October 2005.

A new PDL has been selected for the Space Network Access System (SNAS) task and the handover of work will begin next week. It is expected that a delta SRR will be scheduled in early 2005.

On the Guam DS3 task, both DS3 circuits (prime and redundant) are installed and have been operational. Four of the six T1 circuits have been released. Installation of bulk encryption devices is in progress. The Timeplex interface required re-work and it remains on T1 circuits.

The Space Network IP Services (SNIS) SRR is scheduled for February/March 2005 with a target operational date of March 2007. Visit the SNIS website at: http://snis.gsfc.nasa.gov for additional information.

The MA Fast Forward Concept Review is scheduled for February 2005 with a target operational date of FY06. Visit the Fast Forward website at: http://fastforward.gsfc.nasa.gov for additional information.

Ms. Sadof noted that GSFC continues to perform the OIG functions while waiting for the Air Force to assume this function. Once the authorization is received to go live with the Space Track web site, the OIG and the Air Force will run concurrent operations for 90 days. The OIG is scheduled to shutdown on January 1, 2005, if funding is not received from the Air Force by December 31, 2004.

Mr. Tasaki summarized the TDRS Constellation status/plans noting that his main objective is the operational check out of TDRS 10.

XIII. Space Network and Ground Network Loading Overview

Mr. Levine presented the Space Network and Ground Network Loading Overview. Mr. Levine discussed loading analyses through CY2006 for various SN and GN support scenarios.

XIV. Open Floor

Mr. Levine opened the floor to the audience for comments, questions, and/or concerns.

XIV. Closing

Mr. Levine closed the forum by thanking everyone for participating in the forum.

(Original approved by:)
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